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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,824	06/23/2005	Jean-Yves Le Naour	PF030002 8887	
24498 759	09/14/2006		EXAMINER	
THOMSON LICENSING INC.			LE, DINH THANH	
PATENT OPER	ATIONS		ART UNIT	PAPER NUMBER
PO BOX 5312 PRINCETON, NJ 08543-5312			2816	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/540,824	LE NAOUR ET AL.				
Office Action Summary	Examiner	Art Unit				
	DINH T. LE	2816				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	L. lely filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-6</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. 🔀 Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
Copies of the certified copies of the priority documents have been received in this National Stage						
$\mathcal{W}^{\mathcal{L}}$ application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P	ite atent Application (PTO-152)				
Paper No(s)/Mail Date <u>6/23/05</u> . 6) Other:						

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**DETAILED ACTION** 

Specification

The specification has been checked to the extent necessary to determine the presence of

all possible minor errors. However, the applicant's cooperation is requested in correcting any

errors of which applicant may become aware in the specification.

The specification is objected to because it does not contain the headings, i.e., "Summary

of the Invention". Correction is required.

Claim Rejections

Claim Rejections - 35 USC § 112

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

particularly point out and distinctly claim the subject matter which applicant regards as the

invention. Correction or clarification is required.

In claim 1, the recitation "the spectrum" on line 7 lacks clear antecedent basis. The same

is true for reciting "the locking loop" on line 4 of claim 4.

In claim 4, it is unclear what the "locking loop" is.

In claim 5, it is not understood how the filtering" can be "carried out" on lines 3 and 9

and what the "asymmetrical filter" is.

The remaining claims are dependents from the above claims and therefore also

considered indefinite.

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## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 are rejected under 35 USC 102 (e) as being anticipated by Van Der Woude et al (US2002/0044021, S/N=09/862,283).

Woude et al discloses in Figure 1 a circuit comprising:

- a first band pass filter (1);
- a second bandpass filter (2); and
- a mixer (3) coupled between the filters (1, 2) and the oscillator (4).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 5-6 are rejected under 35 USC 103 (a) as being unpatentable over Woulde et al (US2002/0044021, S/N=09/862,283).

Woulde et al discloses in Figure 1 a circuit comprising all of the limitations of the claimed invention as stated above but does not disclose that the filters are the quartz filters or asymmetrical filter as recited in claim 5. However, as well known in the art, the filter circuit comprises different types, i.e., microstrip filters (quartz filters), SAW filters, waveguide filters. coaxial filter or lump element filters. Each filter is selected based on the operational frequency range, stability or desired operating bandwidth. Thus, selecting the quartz filters or the asymmetrical filter for the circuit of Woulde et al is considered to be a matter of a design expedient for an engineer depending upon the particular application in which the circuit of Woulde et al is to be used. It would have been obvious to a person having skill in the art at the time the invention was made to select the filters as claimed in the circuit of Woude et al for the purpose of accommodating with the operating frequency and the bandwidth of a predtermined system.

Claim 4 is rejected under 35 USC 103 (a) as being unpatentable over Scherer et al (US 6,844,939) in view of Woulde et al ( (US2002/0044021, S/N=09/862,283).

Scherer et al discloses in Figure 2 a circuit comprising a local oscillator loop (32, 42) but does not disclose s filters circuit as recited in claim 1.

Nevertheless, Woude et al suggests in Figure 1 a filter circuit comprising all of the limitations as recited in claim 1 for varying the central frequency of an output signal in a narrow band, see column 1 of page 1.

It would have been obvious to a person having skill in the art at the time the invention

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was made to employ the filter circuit of Woude et al in the circuit of Scherer et al for the purpose of varying the central frequency of the local oscillator in a narrow band.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/29/06